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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/692,538	10/20/2000	John O. Moody	FS-00504	3407

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EXAMINER
NGUYEN, NAM V

ART UNIT	PAPER NUMBER
2635	

DATE MAILED: 03/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/692,538	MOODY ET AL.	
	Examiner	Art Unit	
	Nam V Nguyen	2635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 October 2000* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 October 2000* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *2* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

The application of Moody et al. for an "asset tracking using wireless LAN infrastructure" filed October 20, 2000 has been examined.

Claims 1-14 are pending.

Drawings

This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "180" has been used to designate both a modulator and the condition sensing and/or remote device control. Also reference character "190" has been used to designate both arrows of control from the network and control from the modulator.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: Nowhere in the specification states what an element 185 in Figure 5 is.

The current claim section using phrase "my invention" is implied and should be avoided.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-2, 6-10 and 13-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Bolavage et al. (US# 6,509,828).

Referring to claims 1 and 6, Bolavage et al. disclose interrogating tags on multiple frequencies and synchronizing database using transferable agents as recited in claims 1 and 6. See Figure 1 and respective portions of the system.

Bolavage et al. disclose an asset tracking system (10) (column 2 lines 16 to 27; column 4 lines 47 to 56; see Figure 1) including

a computer network (10 and 14) (i.e. logistics server and Local Area Networks computers) supporting a plurality of wireless links (i.e. wireless from tags to the interrogator) from respective wireless access points (22) (i.e. smart interrogator) (column 4 line 57 to column 5 line 4),

a transponder (30) detectable by said network (10) (column 5 lines 14 to 42), said transponder (30) including means for transmitting identification information (i.e. unique information) (column 1 lines 24 to 28; column 2 lines 16 to 26; column 3 lines 43 to 51), and

Means for accessing and reporting internal network access point information in association with said identification information (column 6 lines 12 to 35).

Referring to claim 2, Bolavage et al. disclose a transponder as recited in claim 1, further including a memory (not label) and wherein said means for transmitting a signal includes means for transmitting signals representing data stored in said memory (column 1 line 61 to column 2 line 3).

Referring to claims 7 and 8, Bolavage et al. disclose a system as recited in claim 6, further including means for associating internal network access point information with geographical locations (i.e. position) (column 5 lines 14 to 42; column 6 line 66 to column 7 line 11).

Referring to claim 9, Bolavage et al. disclose a system as recited in claim 6, further including means for determining proximity of said transponder (30) to an access point (22) (column 5 lines 14 to 42).

Referring to claims 13 and 14, Bolavage et al. disclose a system as recited in claim 9 above, the claims 13 and 14 same in that the claims 7 and 8 already addressed above therefore claims 13 and 14 are also rejected for the same reasons given with respect to claims 7 and 8.

Referring to claim 10, Bolavage et al. disclose a system as recited in claim 9, wherein said means for determining proximity includes triangulation means (i.e. Global positioning system chip of smart interrogator 22 to satellite 24) (column 5 lines 14 to 42; see Figure 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bolavage et al. (US# 6,509,828) as applied to claim 2 above, and in view of Welles, II et al. (US# 5,691,980).

Referring to claim 3-5, Bolavage et al. disclose a system as recited in claim 2, however, Bolavage et al. did not explicitly disclose means for sensing a condition of said device and further including means responsive to a detected change of condition for controlling said means for transmitting a signal.

In the same field of endeavor of wireless communication system, Welles, II et al. teach that means for sensing a condition (68) of said device (10) (column 5 lines 27 to 38; see Figures 1 and 2) and further including means responsive to a detected change of condition for controlling said means for transmitting a signal (column 1 line 47 to column 2 line 16; column 5 lines 4 to 23) in order to transmit the condition of temperature or pressure of the unit to the central station.

One of ordinary skilled in the art recognizes the need to add sensors in the tracking units and a responsive to a detected change of condition of Welles, II et al. in the tag of Bolavage et al. because Bolavage et al. suggest it is desired to provide the tag with sensor device to conduct interrogation with the central station (column 1 lines 28 to 39) and Welles, II et al. teach that a tracking unit with sensor devices to communicate the messages and commands with the central station (column 4 lines 1 to 16) in order to enhance reliability of the communication. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to add sensors in the tracking units and a responsive to a detected change of condition of Welles, II et al. in the tag of Bolavage et al. with the motivation for doing so would have been to provide the tracking asset system has the capability to independently determine and report the status of the tag remotely from a central station.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bolavage et al. (US# 6,509,828) as applied to claim 9 above, and in view of Raleigh et al. (US# 6,101,399).

Referring to claim 11, Bolavage et al. disclose a system as recited in claim 9, however, Bolavage et al. did not explicitly disclose means for determining proximity includes quadratic optimization means.

In the same field of endeavor of wireless communication system, Raleigh et al. teach that means for determining proximity includes quadratic optimization means (column 3 lines 34 to 54; column 18 lines 1 to 19) in order to optimum transmit beam pattern.

One of ordinary skilled in the art recognizes the need to use the quadratic optimization means to determine the proximity of Raleigh et al. in global positioning system to satellite of Bolavage et al. because Bolavage et al. suggest it is desired to provide information regarding the location of the interrogator and an approximate location for the tags by using a global positioning system to satellite (column 5 lines 14 to 30) and Raleigh et al. teaches that determining proximity using the quadratic optimization means (column 3 lines 33 to 55; see Figure 1) in order to find the distance of mobiles object to the base station. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to use the quadratic optimization means to determine the proximity of Raleigh et al. in global positioning system to satellite of Bolavage et al. with the motivation for doing so would have been to provide the distance of tags from the smart interrogator in order to collects the data and resolves them into positional estimates.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bolavage et al. (US# 6,509,828) as applied to claim 9 above, and in view of Gamlyn et al. (US# 5,749,367).

Referring to claim 12, Bolavage et al. disclose a system as recited in claim 9, however, Bolavage et al. did not explicitly disclose means for determining proximity includes a neural network.

In the same field of endeavor of wireless communication system, Gamlyn et al. teach that means for determining proximity includes a neural network (column 1 lines 30 to 64) in order to obtain the monitor changes in the functioning or performance of a person.

One of ordinary skilled in the art recognizes the need to determining the proximity includes a neural network of Gamlyn et al. in the determining the position by the network links of Bolavage et al. because Bolavage et al. suggest it is desired to provide information regarding the position of the interrogator and an approximate location for the tags by using a global positioning system to satellite and network links (column 5 lines 14 to 30; see Figure 1) and Gamlyn et al. teaches that determining proximity includes a neural network (column 7 lines 26 to 48) in order to determine the vector is within or beyond a threshold range of the reference vectors. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to determining the proximity includes a neural network of Gamlyn et al. in the determining the position by the network links of Bolavage et al. with the motivation for doing so would have been to provide an output a signal in order to initiate an event such as the generation of an alarm or the storage of data.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ogasawara (US# 6,513,015) discloses a system and method for customer recognition using wireless identification and visual data transmission.

Werb (US# 6,483,427) discloses an article tracking system.

Wallace et al. (US# 6,463,272) disclose a location reporting pager.

Holtzman et al. (US# 6,400,272) disclose a wireless transceiver for communication with tags.

Vega (US# 6,362,738) discloses a reader for use in a radio frequency identification system and method thereof.

Cromer et al. (US# 6,177,860) disclose a method and economical direct connected apparatus for deploying and tracking computers.

Issacman et al. (US# 6,127,928) disclose a method and apparatus for locating and tracking documents and other objects.

Mufti et al. (US# 5,363,425) disclose a method and apparatus for providing a personal locator, access control and asset tracking service using an in-building telephone network.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nam V Nguyen whose telephone number is 703-305-3867. The examiner can normally be reached on Mon-Fri, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 703-305-4704. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Nam Nguyen
February 26, 2003

MICHAEL HORABIK
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